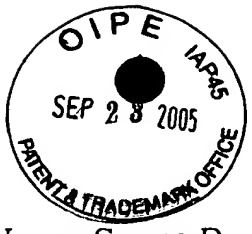
9-17-03



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,132	07/27/2000	KATSUHIKO TSUNEHARA	NIT-210	5646

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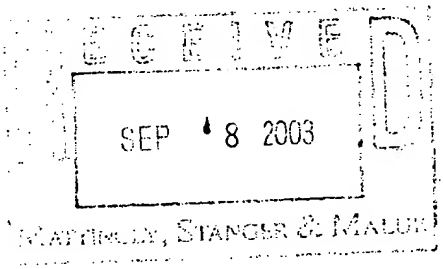
EXAMINER
PERSINO, RAYMOND B

ART UNIT	PAPER NUMBER
2682	11

DATE MAILED: 09/17/2003

due 12/17/03

Please find below and/or attached an Office communication concerning this application or proceeding.



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Office Action Summary	Application No.	Applicant(s)	
	09/601,132	TSUNEHARA ET AL.	
	Examiner	Art Unit	
	Raymond B. Persino	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8,9 and 11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8,9 and 11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 July 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4 & 6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by VALENTINE et al (US 6,011,973 A).

Regarding claim 1, VALENTINE et al discloses a mobile station capable of calculating a current position by position calculation using radio wave, said mobile station comprising: a signal receiver for receiving radio wave (transceiver, element 110 of figure 1); a position calculator for calculating the current position from a result of reception provided by the signal receiver (locating device, element 130 of figure 1, also see column 2 lines 32-44); means for target position input for inputting a position constituting a target (column 2 line 63 to column 3 line 3); a target position holder for holding the target position inputted from the means for target position input (memory, element 150 of figure 1, also see column 2 line 45 to column 3 line 3); a position comparator for comparing the current position of the mobile station calculated by the position calculator with the target position held at the target position holder (column 2

lines 53--58); a position calculation controller for controlling a frequency of position calculation by the position calculator accordance with the result of the position comparison by the position comparator (column 3 lines 55-58); an application operated to a user based on a result of comparison of the position comparator (column 2 lines 58-63); and an application controller for controlling operation of the application by using the result of position comparison by the position comparator (column 2 lines 58-63).

Regarding claim 11, see the rejection of the parent claim regarding the subject matter this claim depends from. VALENTINE et al further discloses that the position calculation controller executes a control such that the position calculation controller increases a frequency of the position calculation by the position comparator when the result of the position comparison by the position comparator signifies that the current position and the target position are close to each other and executes a control such that the position calculation controller reduces the frequency of the position calculation by the position calculator when the result of the position comparison by the position comparator signifies that the current position and the target position are remote from each other (column 3 lines 55-58).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over VALENTINE et al (US 6,011,973 A) in view of SHINOZUKA (JP 10-332407 A).

Regarding claims 2 and 3, VALENTINE et al discloses a mobile station capable of calculating a current position by position calculation using radio wave, said mobile station comprising: a signal receiver for receiving radio wave (transceiver, element 110 of figure 1); a position calculator for calculating the current position from a result of reception provided by the signal receiver (locating device, element 130 of figure 1, also see column 2 lines 32-44); means for target position input for inputting a position constituting a target (column 2 line 63 to column 3 line 3); a target position holder for holding the target position inputted from the means for target position input (memory, element 150 of figure 1, also see column 2 line 45 to column 3 line 3); a position comparator for comparing the current position of the mobile station calculated by the position calculator with the target position held at the target position holder (column 2 lines 53--58); a position calculation controller for controlling a frequency of position calculation by the position calculator accordance with the result of the position comparison by the position comparator (column 3 lines 55-58). However, VALENTINE et al does not disclose a vibration (alarm) generator for vibrating the mobile station based on a result of comparison of the position comparator; and a vibration (alarm) controller for controlling generation and abeyance of vibration (alarm) of the vibration (alarm) generator by using the result of position comparison by the position comparator. SHINOZUKA discloses a vibration (alarm) generator for vibrating the mobile station based on a result of comparison of the position comparator; and a vibration (alarm)

controller for controlling generation and abeyance of vibration (alarm) of the vibration (alarm) generator by using the result of position comparison by the position comparator (abstract). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for there to be included a vibration (alarm) generator for vibrating the mobile station based on a result of comparison of the position comparator; and a vibration (alarm) controller for controlling generation and abeyance of vibration (alarm) of the vibration (alarm) generator by using the result of position comparison by the position comparator (abstract). Including a vibrator (alarm) on the mobile station allows the user of the mobile station to have feedback of the comparison by the position comparator.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over VALENTINE et al (US 6,011,973 A) in view of TAKECHI (JP 9-35192 A).

Regarding claim 4, VALENTINE et al discloses a mobile station capable of calculating a current position by position calculation using radio wave, said mobile station comprising: a signal receiver for receiving radio wave (transceiver, element 110 of figure 1); a position calculator for calculating the current position from a result of reception provided by the signal receiver (locating device, element 130 of figure 1, also see column 2 lines 32-44); means for target position input for inputting a position constituting a target (column 2 line 63 to column 3 line 3); a target position holder for holding the target position inputted from the means for target position input (memory, element 150 of figure 1, also see column 2 line 45 to column 3 line 3); a position comparator for comparing the current position of the mobile station calculated by the

position calculator with the target position held at the target position holder (column 2 lines 53--58); a position calculation controller for controlling a frequency of position calculation by the position calculator accordance with the result of the position comparison by the position comparator (column 3 lines 55-58). However, VALENTINE et al does not disclose means for making a telephone call for making a telephone call based on a result of comparison of the position comparator; a telephone number holder for holding a telephone number of a message destination used in making the telephone call by the means for making a telephone call; a telephone message holder for holding a message transmitted after making the telephone call; and an application controller for controlling to make the telephone call by the means for making a telephone call by using the result of position comparison by the position comparator. TAKECHI discloses means for making a telephone call for making a telephone call based on a result of comparison of the position comparator; a telephone number holder for holding a telephone number of a message destination used in making the telephone call by the means for making a telephone call; a telephone message holder for holding a message transmitted after making the telephone call; and an application controller for controlling to make the telephone call by the means for making a telephone call by using the result of position comparison by the position comparator. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for there to be included means for making a telephone call for making a telephone call based on a result of comparison of the position comparator; a telephone number holder for holding a telephone number of a message destination used in making the telephone

call by the means for making a telephone call; a telephone message holder for holding a message transmitted after making the telephone call; and an application controller for controlling to make the telephone call by the means for making a telephone call by using the result of position comparison by the position comparator. Including this feature on the mobile station allows notification to be made of the mobile station being at the target location.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over VALENTINE et al (US 6,011,973 A) in view of an examiner's official notice.

Regarding claim 5, VALENTINE et al discloses a mobile station capable of calculating a current position by position calculation using radio wave, said mobile station comprising: a signal receiver for receiving radio wave (transceiver, element 110 of figure 1); a position calculator for calculating the current position from a result of reception provided by the signal receiver (locating device, element 130 of figure 1, also see column 2 lines 32-44); means for target position input for inputting a position constituting a target (column 2 line 63 to column 3 line 3); a target position holder for holding the target position inputted from the means for target position input (memory, element 150 of figure 1, also see column 2 line 45 to column 3 line 3); a position comparator for comparing the current position of the mobile station calculated by the position calculator with the target position held at the target position holder (column 2 lines 53--58); a position calculation controller for controlling a frequency of position calculation by the position calculator accordance with the result of the position comparison by the position comparator (column 3 lines 55-58). However, VALENTINE

does not disclose a switch for a ringer for making on or off a ringer when there is telephone signal arrival at the mobile station based on a result of comparison of the position comparator; and a ringer controller for controlling switching operation of the switch of ringer by using the result of position comparison by the position comparator. Nevertheless, the examiner takes official notice that was know in the art at the time the invention was made for a mobile station's ringer to be turned off when it is determined that the mobile station is in a quiet area. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for there to be included a means for a mobile station's ringer to be turned off when it is determined that the mobile station is in a quiet area. Including this feature on the mobile station allows the mobile station to be prevented from making noise in quiet areas.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over VALENTINE et al (US 6,011,973 A) in view of NAKAMURA (US 6,085,096 A).

Regarding claim 6, VALENTINE et al discloses a mobile station capable of calculating a current position by position calculation using radio wave, said mobile station comprising: a signal receiver for receiving radio wave (transceiver, element 110 of figure 1); a position calculator for calculating the current position from a result of reception provided by the signal receiver (locating device, element 130 of figure 1, also see column 2 lines 32-44); means for target position input for inputting a position constituting a target (column 2 line 63 to column 3 line 3); a target position holder for holding the target position inputted from the means for target position input (memory, element 150 of figure 1, also see column 2 line 45 to column 3 line 3); a position

comparator for comparing the current position of the mobile station calculated by the position calculator with the target position held at the target position holder (column 2 lines 53--58); a position calculation controller for controlling a frequency of position calculation by the position calculator accordance with the result of the position comparison by the position comparator (column 3 lines 55-58). However, VALENTINE et al does not disclose a switch for a ringer for making on or off a ringer when there is telephone signal arrival at the mobile station based on a result of comparison of the position comparator; and a ringer controller for controlling switching operation of the switch of ringer by using the result of position comparison by the position comparator. NAKAMURA discloses a switch for a ringer for making on or off a ringer when there is telephone signal arrival at the mobile station based on the position of the mobile station; and a ringer controller for controlling switching operation of the switch of ringer based on the position of the mobile station (column 2 line 49 to column 3 line 50). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for there to be included a switch for a ringer for making on or off a ringer when there is telephone signal arrival at the mobile station based on the position of the mobile station; and a ringer controller for controlling switching operation of the switch of ringer based on the position of the mobile station. Including this feature on the mobile station allows the mobile station to be deactivated in restricted areas.

8. Claims 8 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art cited in the rejection of the parent claims.

Regarding claims 8 and 12-15, see the rejections of the parent claim regarding the subject matter these claims depend from. VALENTINE et al further discloses that the position calculation controller executes a control such that the position calculation controller increases a frequency of the position calculation by the position comparator when the result of the position comparison by the position comparator signifies that the current position and the target position are close to each other and executes a control such that the position calculation controller reduces the frequency of the position calculation by the position calculator when the result of the position comparison by the position comparator signifies that the current position and the target position are remote from each other (column 3 lines 55-58).

9. Claims 9 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art cited in the rejection of the parent claims and further in view of DAVENPORT et al (US 6,487,393 A).

Regarding claims 9 and 16-20, see the rejections of the parent claims regarding the subject matter these claims depend from. However, the prior art cited in the rejection of the parent claims does not disclose that the position calculation controller uses a history of the result of the position comparison by the position comparator and executes the control of increasing the frequency of the position calculation by the position calculator when the mobile station approaches the target at a high speed and executes the control of reducing the frequency of the position calculation by the position calculator when the mobile station approaches the target position at a low speed. DAVENPORT et al discloses that the frequency of the position calculation can be based

on speed (column 2 lines 60-63). Therefore it would have been obvious to a person of ordinary skill at the art at the time the invention was made for the frequency of the position calculation can be based on speed. Since the rate of the change in position is related to the speed, it would be an improvement to adjust the rate of position calculation so that not too great a distance is traversed without determining the position. Doing this will increase accuracy and prevent the target from being reached without the mobile unit having performed a position calculation.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond B. Persino whose telephone number is (703) 308-7528. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Raymond B. Persino RP
Examiner
Art Unit 2682

RP RP

CHARLES APPIAH
PRIMARY EXAMINER

4/5/03

CHARLES APPIAH
PRIMARY EXAMINER